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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,978	08/17/2001	Coral A. Petit-Roberts	CORSTONE1	4214

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EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,978

Applicant(s)

PETIT-ROBERTS ET AL.

Examiner

Alicia Chevalier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2005 and 31 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 8-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 14-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

RESPONSE TO AMENDMENT

1. Claims 1-23 are pending in the application, claims 8-13 are withdrawn from consideration.
2. Amendments to the claims, filed on March 13, 2005, have been entered in the above-identified application.

REJECTIONS

3. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claim Rejections - 35 USC § 102

4. Claims 1, 2, 4-7, 14, 15, 17-19 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Harvey (U.S. Patent No. 3,885,240).

Harvey discloses structural building modules for use as an exterior wall in the manufacture and construction of low cost prefabricated houses (*col. 1, lines 9-11*).

Regarding Applicant's independent claim 1, Harvey discloses a laminated material (*structural building module, title*) that is deemed to be rigid, since the laminate is hardened and contains reinforcing metal rods (*col. 8, lines 35-49*). The laminate material comprises a two-sided laminate (*plastic shell, col. 8, line 35*) that is deemed to be rigid, since the laminate is hardened and contains reinforcing metal rods (*col. 8, lines 35-49*), and a reinforcing material (*concrete filler material, col. 8, line 53*). The rigid two-sided laminate is configured wherein

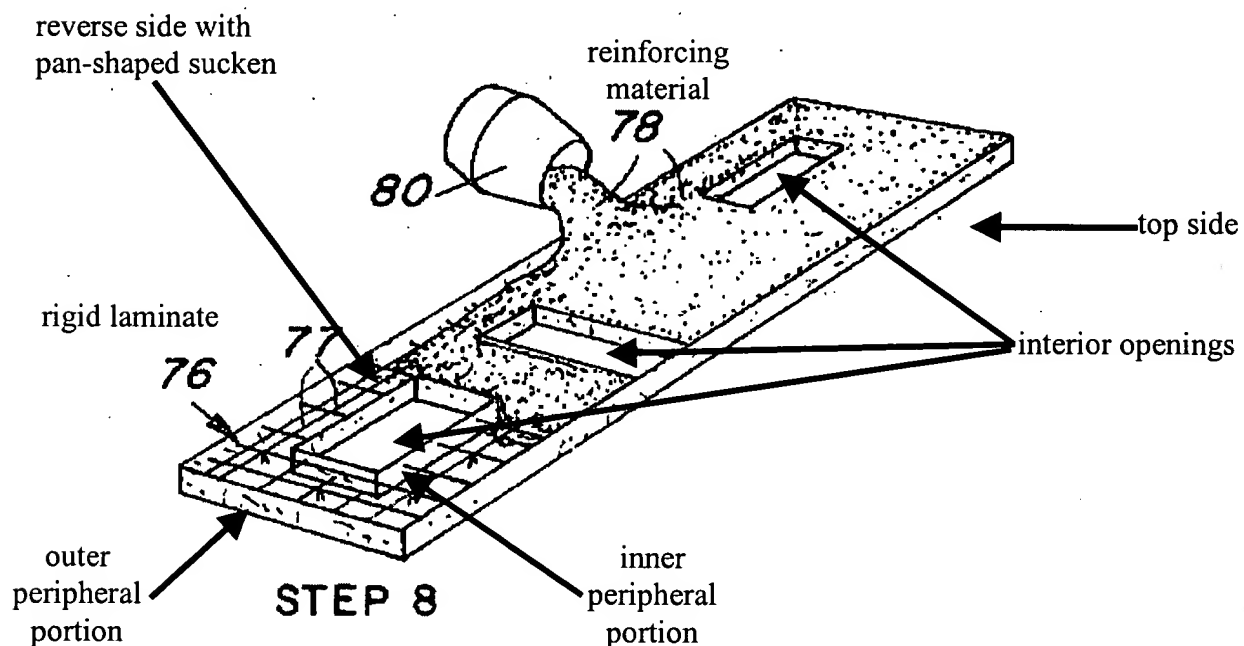
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peripheral portions thereof border a pan-shaped sunken portion of a side thereof (*figure 3, steps 7 and 8*).

The reinforcing material is self-bonded to the rigid two-sided laminate within the pan-shaped sunken portion and is contained within the peripheral portions of the laminate (*figure 3, steps 8 and 9*). The reinforcing material is self-bonding, since the concrete is poured into the plastic shell and cured without an extra bonding agent (*col. 8, line 50 through col. 9, line 30*).

Furthermore, the rigid laminated material has at least one interior opening extending completely through the rigid laminated material and one side of the rigid two-sided laminate extends at least partially into the at least one interior opening (*figure 3, step 7*).

The following figure from Harvey accompanies the discussion of claim 1.



Regarding Applicant's claim 2, Harvey further discloses wherein the two-sided laminate has outer peripheral portions and interior peripheral portions bordering at least partially the pan-shaped sunken portion on a side thereof (*figure 3, step 7*).

Regarding Applicant's claim 21, regarding the limitation "at least one interior opening is designed to receive a plumbing fixture", the Examiner has given the terms the broadest reasonable interpretations consistent with the written description in Application's specification as it would be interpreted by one of ordinary skill in the art. MPEP § 2111. The Examiner has interpreted this limitation to mean that the opening is at least the size of a plumbing pipe or larger. Furthermore, plumbing pipes can have diameters as small as ½". Therefore, the limitation is anticipated by any opening that is at least ½" in diameter or larger.

Harvey discloses at least one interior opening is designed to receive a plumbing fixture, since the reference teaches that the laminate material has a door opening (*col. 7, line 36*). A door opening has dimensions to accommodate a person passing through it, i.e. about 3' x 8', therefore it is deemed to be designed to receive a plumbing fixture.

Regarding Applicant's claim 22, since Harvey discloses a door opening (*col. 7, line 36*), which has dimensions to accommodate a person passing through it, i.e. about 3' x 8', it is deemed to be sized to accommodate a plumbing fixture such as a faucet, a sink, and a combination of the foregoing.

Regarding Applicant's claim 23, Harvey discloses that one side of the rigid two-sided laminate, i.e. the inner peripheral portions, extends completely through the at least one interior opening (*figure 3, steps 7 and 8*).

Regarding Applicant's independent claim 4, Harvey discloses a laminated material (*structural building module, title*) that is deemed to be rigid, since the laminate is hardened and contains reinforcing metal rods (*col. 8, lines 35-49*). The laminate material comprises a laminate (*plastic shell, col. 8, line 35*) that is deemed to be rigid, since the laminate is hardened and

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contains reinforcing metal rods (*col. 8, lines 35-49*), and a reinforcing material (*concrete filler material, col. 8, line 53*). The rigid laminate has a top side and a reverse side, wherein the reverse side comprises a pan-shaped sunken portion (*figure 3, steps 7 and 8*).

The reinforcing material is self-bonding and applied to the pan-shaped sunken portion and contained in the pan-shaped portion of the laminate (*figure 3, steps 8 and 9*). The reinforcing material is self-bonding, since the concrete is poured into the plastic shell and cured without an extra bonding agent (*col. 8, line 50 through col. 9, line 30*).

Furthermore, the rigid laminated material has at least one interior opening extending completely through the rigid laminated material and the top side of the rigid laminate extends at least partially into the at least one interior opening (*figure 3, step 7*).

Regarding Applicant's claim 5, regarding the limitation "at least one interior opening is designed to receive a plumbing fixture", the Examiner has given the terms the broadest reasonable interpretations consistent with the written description in Application's specification as it would be interpreted by one of ordinary skill in the art. MPEP § 2111. The Examiner has interperated this limitation to mean that the opening is at least the size of a plumbing pipe or larger. Furthermore, plumbing pipes can have diameters as small as ½". Therefore, the limitation is anticipated by any opening that is at least ½" in diameter or larger.

Harvey discloses at least one interior opening is designed to receive a plumbing fixture, since the reference teaches that the laminate material has a door opening (*col. 7, line 36*). A door opening has dimensions to accommodate a person passing through it, i.e. about 3' x 8', therefore it is deemed to be designed to receive a plumbing fixture.

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Regarding Applicant's claim 14, since Harvey discloses a door opening (*col. 7, line 36*), which has dimensions to accommodate a person passing through it, i.e. about 3' x 8', it is deemed to be sized to accommodate a plumbing fixture such as a faucet, a sink, and a combination of the foregoing.

Regarding Applicant's claim 15, Harvey discloses that the top side of the rigid laminate, i.e. the inner peripheral portions, extends completely through the at least one interior opening (*figure 3, steps 7 and 8*).

Regarding Applicant's independent claim 6, Harvey discloses a laminated material (*structural building module, title*) that is deemed to be rigid, since the laminate is hardened and contains reinforcing metal rods (*col. 8, line 35-49*). The laminate material comprises a laminate (*plastic shell, col. 8, line 35*) that is deemed to be rigid, since the laminate is hardened and contains reinforcing metal rods (*col. 8, line 35-49*), and a reinforcing material (*concrete filler material, col. 8, line 53*). The rigid laminate has a top side and a reverse side, wherein the reverse side has raised edges (*figure 3, steps 7 and 8*).

The reinforcing material is self-bonding to the reverse side contained within the raised edges of the laminate (*figure 3, steps 8 and 9*). The reinforcing material is self-bonding, since the concrete is poured into the plastic shell and cured without an extra bonding agent (*col. 8, line 50 through col. 9, line 30*).

Furthermore, the rigid laminated material has at least one interior opening extending completely through the rigid laminated material and the top side of the rigid laminate extends at least partially into the at least one interior opening (*figure 3, step 7*).

Regarding Applicant's claim 7, Harvey discloses that the at least one interior opening has edges raised from the reverse side bordering the opening (*figure 3, step 7*).

Regarding Applicant's claim 17, regarding the limitation "at least one interior opening is designed to receive a plumbing fixture", the Examiner has given the terms the broadest reasonable interpretations consistent with the written description in Application's specification as it would be interpreted by one of ordinary skill in the art. MPEP § 2111. The Examiner has interpreted this limitation to mean that the opening is at least the size of a plumbing pipe or larger. Furthermore, plumbing pipes can have diameters as small as $\frac{1}{2}$ ". Therefore, the limitation is anticipated by any opening that is at least $\frac{1}{2}$ " in diameter or larger.

Harvey discloses at least one interior opening is designed to receive a plumbing fixture, since the reference teaches that the laminate material has a door opening (*col. 7, line 36*). A door opening has dimensions to accommodate a person passing through it, i.e. about 3' x 8', therefore it is deemed to be designed to receive a plumbing fixture.

Regarding Applicant's claim 18, since Harvey discloses a door opening (*col. 7, line 36*), which has dimensions to accommodate a person passing through it, i.e. about 3' x 8', it is deemed to be sized to accommodate a plumbing fixture such as a faucet, a sink, and a combination of the foregoing.

Regarding Applicant's claim 19, Harvey discloses that the top side of the rigid laminate, i.e. the inner peripheral portions, extends completely through the at least one interior opening (*figure 3, steps 7 and 8*).

Claim Rejections - 35 USC § 103

5. Claims 3, 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey in view of Koeppel (U.S. Patent No. 4,233,080).

Harvey is relied upon as described above.

Harvey further discloses that the rigid laminate is deemed to be substantially flat sheet, since the plastic shell is rolled, i.e. smoothed out, to eliminate air bubbles (*col. 8, lines 13-17 and figure 3, steps 4 and 7*).

Harvey fails to disclose that the rigid laminate comprises acrylic.

Koeppel discloses composite building elements (*title*) for walls in prefabricated houses (*col. 8, lines 52-57*). The building elements comprise acrylic polymers in order to render the finished material impermeable to water and atmospheric humidity (*col. 5, lines 65 through col. 6, line 4*).

Harvey and Koeppel are analogous because they both discuss composite elements for prefabricated houses.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use Koeppel's acrylic polymers in the rigid laminate of Harvey in order to improve the water resistance of the laminate. One of ordinary skill in the art would have been motivated to use acrylic polymers in prefabricated housing modules because they render the finished material impermeable to water and atmospheric humidity (*Koeppel col. 5, lines 65 through col. 6, line 4*).

ANSWERS TO APPLICANT'S ARGUMENTS

6. Applicant's arguments in the response filed January 31, 2005 regarding the 35 U.S.C. 102 rejection of Harvey (U.S. Patent No. 3, 885,240) of record have been carefully considered but are deemed unpersuasive.

Applicant argues that the filler material in Harvey is not "self-bonding" because Harvey specifies that an aggregate material is applied to the plastic shell to improve the bonding between the shell and the filler material (Harvey col. 8, lines 21-27).

The aggregate is part of the shell material, i.e. the rigid two-sided laminate, as seen in Harvey at col. 8, lines 29-34 where it recites "[a]fter the turkey rock (aggregate) has been applied to the gel coat, the gel coat is allowed to harden, a chemical reaction known as kicking occurring between the resin and the fiberglass to bond the ring between the resin and the fiberglass to bond the two together whereby a strong, lightweight fiber reinforced *plastic shell is formed.*" So the fact that the aggregate improves bonding between the filler material and the shell (Harvey col. 8, lines 24-27) further highlights the point that the filler material is self-bonded to the rigid two-sided laminate, since the aggregate is part of the shell. Furthermore, as stated before the reinforcing material is self-bonding, since the concrete is poured into the plastic shell, which contains an aggregate, and cured without an extra bonding agent (Harvey col. 8, line 50 through col. 9, line 30).

Applicant also argues that that reinforcing rods also provide additional bonding between the filler and the plastic shell.

The reinforcing rods and the aggregate, “turkey rock,” are parts of the plastic shell (*Harvey col. 8, lines 21-49*). The fact that these components in the plastic shell, i.e. rigid two-sided laminate, help the bonding between the plastic shell and the filler material merely clarifies the point that the fill material, i.e. reinforcing material, is self-bonded to the plastic shell because the components of the plastic shell improve the bonding between the two layers.

Applicant argues that the dimensions of the openings are distinct from the window and door openings disclosed by Harvey and the other references cited in the art of record due to the amendments in claims 5, 17 and 21 regarding the recitation of plumbing fixtures. Applicant further states that the amendment more clearly defines the specification and limits the dimensions of the openings.

First, Applicant has amended claims 5, 17 and 21 to recites “wherein the at least one interior opening is deigned to receive a plumbing fixture.” Second, Applicant has not clearly pointed out how this new limitation clearly defines the specifications and limits the dimensions of the openings. Third, Applicant specification regarding the openings and size recites “[i]t is anticipated that a plurality of *openings of various sizes and shapes*, to accommodate faucets and other plumbing fixtures, can similarly be created within the confines of the laminate (*page 6, lines 20-22*). Finally, since Applicant’s specification does not specifically clarify the size of the openings, except for a broad generalization, the Examiner has given the terms the broadest reasonable interpretations consistent with the written description in Application’s specification as it would be interpreted by one of ordinary skill in the art. MPEP § 2111. The Examiner has interperated this limitation to mean that the opening is at least the size of a plumbing pipe or

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larger. Furthermore, plumbing pipes can have diameters as small as ½". Therefore, the limitation is anticipated by any opening that is at least ½" in diameter or larger.

Harvey discloses at least one interior opening is designed to receive a plumbing fixture, since the reference teaches that the laminate material has a door opening (*col. 7, line 36*). A door opening has dimensions to accommodate a person passing through it, i.e. about 3' x 8', therefore it is deemed to be designed to receive a plumbing fixture.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Alicia Chevalier". The signature is fluid and cursive, with the first name "Alicia" and last name "Chevalier" clearly distinguishable.

Alicia Chevalier

4/5/05